December 2010 Weather Summary

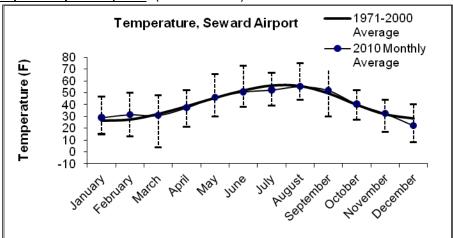
Although the New Year was ushered in by above-freezing temperatures and strong wind and rain, most of December in Kenai Fjords NP saw clear skies and cold temperatures. As measured at the Seward airport weather station, December's average temperature near Kenai Fjords NP was 22.3 degrees F (5.8 degrees F below the 30-year average December temperature). Total precipitation for December was 3.57 inches, 4.3 inches less than the 30-year average for this month, making the month the 16th driest on record. December 31st was the warmest day of the month with a high of 40 degrees F; December 24th was the coldest day with a low of 8 degrees F.

Also of note:

- Arctic sea ice extent during December 2010 was the lowest for that month since the beginning of satellite
 records (1979). Low-ice conditions occurred in conjunction with above-average air temperatures where
 ice would normally expand at this time of year. According to the National Snow and Ice Data Center,
 warm temperatures were the result of both unfrozen areas of ocean that continued to release heat into
 the atmosphere and an unusual circulation pattern that brought warm air into the arctic from the south.
- The winter snowpack shows signs of increased danger for avalanches. The Chugach N.F. Avalanche Information Center also predicts that the ice crust that developed over the New Year will create hazardous conditions in the backcountry as new snow accumulates on top of it.
- <u>Winter 2010, Alaska Climate Dispatch</u>: A state-wide seasonal summary & outlook; features 'Status of the Bering Sea', 'Autumn Weather Conditions in Alaska', and a 'Winter Seasonal Climate Outlook'.
- Global Warming Mapped. A NASA publication showing climate warming for the years 2000-2009 contrasted with 1970-1979.
- Ocean Acidification, Today and in the Future, NOAAs Climate Watch Magazine.
- Do you use weather observations in Alaska? If so, the National Weather Service is sharing their information and <u>asking for feedback</u>.
- The National Weather Service's one month weather outlook (January 2011) is for below normal temperatures (especially in southeast Alaska) and below median precipitation in southcentral Alaska. The three month outlook (January-February-March 2011) is for below average temperatures and below median precipitation. La Niña conditions are expected to last at least into the Northern Hemisphere spring 2011. http://www.cpc.noaa.gov/
- NOAA climate services portal serves as a single point-of-entry for NOAA's extensive climate information, data, products, services, and the climate science magazine ClimateWatch. http://www.climate.gov/
- Additional, detailed climate information is available from the UAF Alaska Climate Research Center monthly state-wide summaries http://akclimate.org/Summary/current_sum.html
- A strong La Niña in December 2010 was one factor behind our cool temperatures. <u>NASA Earth</u>
 <u>Observatory</u>.

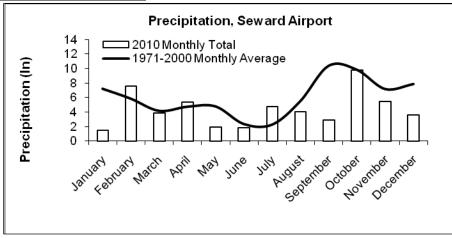
Read more to find out about the local climate for December 2010

Seward Airport Temperature, 2010 (station #26438)



Monthly and 30-year average temperature (F) at Seward airport. 1971-2000. 2010 Monthly average values are shown with thin solid line. The range of maximum and minimum daily temperatures for each month are shown with dashed vertical lines.

Seward Airport Precipitation, 2010



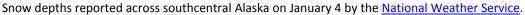
Monthly and 30-year average precipitation (inches) at Seward airport.

Rivers

Resurrection River at Exit Glacier Bridge is monitored by the <u>Alaska-Pacific River Forecast Center</u>. The Resurrection River stage height is currently well below the flood action stage.

Exit Creek water level (stage height) data is not collected in winter.

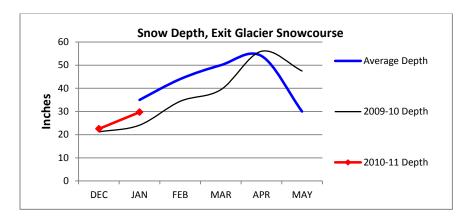
Snow & Ice





Snow is monitored by the <u>Natural Resources Conservation Service</u> with most measurements and reporting taking place December to May.

Snow depth at Exit Glacier Ranger Station on December 29th was 29.7 inches, slightly more than last year at this time, with a water equivalent of 7.9 inches.



Weather Station data (map of [some] stations Western Region Climate Center or MesoWest)

Seward Airport

Seward Hwy MP#12

Grouse Crk Divide

Exit Glacier

Harding Icefield

McArthur Pass

Nuka Glacier

Pilot Rock

Buoy 76-Cape Cleare

Weather Forecasts

Seward Summary

Marine Forecast

Surface Map

Graphical Forecast

4-8 Day Forecast